



Duhring (L.A.)

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CASE OF

Dermatitis Vesiculosa Neurotraumatica  
of Forearm.

Read before the College of Physicians, Philadelphia,  
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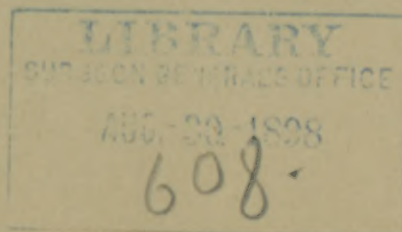
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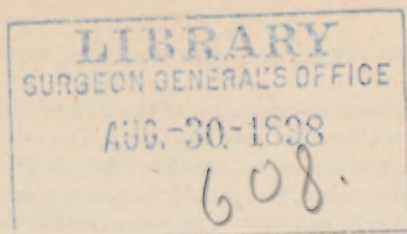
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## CASE OF DERMATITIS VESICULOSA NEURO- TRAUMATICA OF FOREARM.

A. A. is a single woman, aged twenty-nine years, of small stature, frail, and spare. There exists a history of varied nervous symptoms extending over the past three years, including frequent and protracted gagging and vomiting attacks; complete cessation of the menstrual flow two years ago, which condition still exists; heart palpitation; crying spells; and globus hystericus. She was burned with a flat-iron eighteen months ago on the flexor surface of the left forearm just above the wrist, the area being about the size of a silver dollar. The burn was superficial and only slightly blistered, and at first presented no peculiarities. It did not, however, heal readily or entirely, and from some unknown and internal cause began to break out anew, and within a month from the accident showed a superficial gangrenous patch, confined to the region of the burn, which remained about six weeks. The patch now began to be more inflamed and painful, with at first darting then aching pains, which continued in about the same severity for two months. The whole forearm at the date of the gangrenous patch was reddened, swollen, and tender, and was accompanied with throbbing pain, which could be distinguished from the darting pain.

The present form of eruption first appeared about the time the burn seemed to be nearly healed, or a month or six weeks after the accident, in the form of a single papulo-vesicle, or a "pimple," and this not at the site of the burn, but on the extensor surface of the forearm. In a week or two this lesion ulcerated and crusted, and other similar papulo-vesicles, vesicles and blebs appeared beside or near this one until the present area of disease was ultimately attained. Some healed while new ones formed, most of them leaving scars as they passed away. Various forms of local treatment were employed, none of which seemed to possess power to arrest the process, nor indeed to favorably influence the eruption. Arsenic was on several occasions prescribed, but had to be discontinued on account of intolerance of the drug. Reference has been made to the swollen and painful condition of the whole arm at times; this has occurred frequently,—every few weeks or even oftener,—and is invariably aggravated by exertion or any exercise of the limb. After these attacks of general pain and swelling, the whole limb is sore to contact, and is painful within. The pain, both darting and aching, is most severe in damp or cold weather.

When I saw the case first, in January, 1891, the lower half of the forearm was involved and encircled by the disease, and especially the extensor surface, the burn, it will be remembered, having been seated on the flexor surface. The disease consisted of a small, hand-sized, irregularly-shaped, ill-defined, chronically-inflamed, vesicular and bullous, herpetic-looking, more or less crusted, scarred patch, with scars considerably beyond the inflamed skin. Apart from the old scars, it possessed at first sight the general appearance of an injury due rather to the local action of an acid or to some chemical substance than to disease from within. There was, moreover, some oozing and discharge from broken or ruptured vesicles, blebs, and excori-



ated surfaces. The inflammatory process of the skin was superficial, for there was but little thickening, and the scars were not deep. The vesicular and bullous lesions were irregular in outline, more or less angular; distended, but with no disposition to rupture; some flat, others raised, and usually were unaccompanied by areolæ. They possessed an herpetic aspect, and from this characteristic formation were manifestly due to direct nerve influence. The crusts were depressed, saucer-shaped, and adherent to the skin in the centre, with everted edges. They were variegated in color, with bluish and blackish tints. The scars were plainly the result of the vesicular and bullous lesions. The patch was irritable, sore to the touch, and painful, and the whole extremity up to the shoulder was likewise the seat of darting nerve-pain.

The process has continued in much the same manner up to the present date, although the pain in the patch and the nerve-pain in the limb are not so severe as last winter, nor is the inflammation of the skin so violent now as formerly. With the view of stimulating the nerve-trunks and fibres into healthy action, I advised the use of a weak galvanic current. This has been applied for a month, but no positive results have been obtained. Before abandoning the remedy, however, it is proposed not only to stimulate more freely, but also to act upon the nerve-trunks at remote points above the seat of the disorder.

Concerning the pathology of the disease, it may be stated that I believe the process to be a mild form of neuritis of a peculiar kind, having its origin in the burn, from which it extended, involving collateral as well as the nerve-trunks. It appears to be a local disease,—that is, to be confined to the limb. The hysteria must, of course, be taken into consideration. It is questionable, however, whether the symptoms can be construed as indicative of a central or reflex nature. The latter explanation has been suggested by Kaposi, Doutrelepon, and others for a series of similar though not identical cases, occurring for the most part in hysterical women, to which further reference will be made. The possible factitious nature of the disease need not be entertained. The question as to the infectious nature of the disease may be alluded to, but there do not seem to be any symptoms pointing that way. The case is a rare one, although I am aware that more or less similar forms of disease have been recorded. With the title "Traumatic Neurosal Pemphigus," Dr. J. H. Galton, of England, has recently reported a case similar to the one just considered (*British Medical Journal*, June 13, 1891).

The patient was a well-nourished, intelligent girl, aged seventeen, who had suffered from fits of an epileptic nature from childhood. In December, 1887, while cutting wood, she chopped off the distal phalanges of the index and ring fingers and cut through the middle phalanx of the middle finger. The wounds did not heal readily, but remained open for three months. Shortly afterwards patches of redness, followed by blebs, appeared on the left wrist, hand, and arm. The eruption was peculiar from the rapid way in which it spread; sometimes in a quarter of an hour the whole hand and arm would be covered with large blebs, which would burst, and give out a thin, sticky, watery discharge, which on drying would leave the surface of the skin of a purple or bluish tint. The circulation also seemed feeble.

In February, 1889, she had a crop of these on the left leg. Up to that time she was rarely without a series of blebs or threatening of them for quite twelve months. Various remedies, including arsenic and iron, were tried without effect.



At this time the puckered scars of the ring and middle fingers were very tender, and the stumps were amputated.

In March, 1889, she had a much slighter return of vesicles, and since, for the next two years, only occasionally a few vesicles. At one period a small fragment of bone worked out of the dorsal surface of the wrist. The vesicles occurred in irregular patches upon both surfaces of the forearm in the area of the median and ulnar nerves.

Dr. Galton considers that the irritation was reflex because of the disseminated distribution of its effects and the occurrence of the disease on the leg of the same side, as well as its cessation after removal of a source of irritation upon the median nerve alone.

Erasmus Wilson<sup>1</sup> refers briefly to the case of a medical man who punctured his right hand. Three or four weeks afterwards an eruption of blebs made its appearance on the left thigh, and was repeated from time to time for eighteen months. Their outbreak was preceded by feverish symptoms; there was a scalded sensation in the skin, and the next morning a fully-developed bulla would be discovered.

A similar form of disease has recently been narrated by Ehrmann,<sup>2</sup> that of a pemphigoid eruption, having its seat upon the district of the trigemini, due to a carious tooth, which later appeared on the other side of the face. The eruption recurred from time to time, and remained unilateral until the removal of the tooth, when it manifested itself on the other side.

Professor Kaposi,<sup>3</sup> of Vienna, with the title "*Pemphigus Neurotraumaticus (Hystericus)*," reports the case of a female nurse, aged twenty-two years, who had wounded the nail-fold with a rusty nail, the wound having been dressed with iodoform. In a few days blebs appeared on the dorsal surface of the middle finger, and a few days later on the dorsum of the hand and wrist. Four weeks after the accident, when she first came under observation, there existed a reddened, painful patch, about the size of the palm of the hand, covered with large blebs. Immediately afterwards blebs began to appear in other localities, being always preceded by pain in the affected part, followed in two or three hours by bright redness over a variably-sized area, upon which urticarial lesions formed, succeeded in a few hours by blebs, from the size of a pea to an egg. With each attack the cutaneous involvement became more general. Kaposi regards the disease as a neuritis following a wound, notwithstanding that the further course of the affection was not on the track of the wounded nerve. From the peripheral excitation the process, he thinks, passed over to the central nervous system, more especially to the vaso-motor system.

Dr. D. W. Montgomery,<sup>4</sup> of San Francisco, relates the history of a medical student, of a neurotic temperament, who received a blow on the index

<sup>1</sup> Diseases of the Skin, p. 307, London, 1867.

<sup>2</sup> Archiv für Derm. u. Syph., 1890, p. 954.

<sup>3</sup> Wiener Klin. Wochenschr., No. 22, 1890.

<sup>4</sup> Occidental Medical Times, October, 1891.



finger of the left hand, causing a wound which was slow to heal, almost necessitating amputation. Three years afterwards, and during the following three years, a pemphigoid eruption invaded the skin and mucous membranes of different regions, which both Dr. Montgomery and Dr. Regensburger, who also had the patient under observation, regarded as due to the previous traumatism, notwithstanding the long period elapsing between the wound and the cutaneous manifestation.

Similar to this is the case narrated by Kopp,<sup>1</sup> of Munich, in which, five years before the cutaneous manifestation, the patient was burned on the left hand. The wound inclined to ulcerate, but finally healed with keloidal scars.

Routier,<sup>2</sup> of Paris, gives the history of a young girl who was affected by panaritium, which was followed by numerous gangrenous patches on the skin of the same hand and forearm, which subsequently spread over the upper portion of the thorax. This observer is inclined to regard the disease as due to a general neurosis.

Professor Doutrelepont,<sup>3</sup> of Bonn, under the title "Acute Multiple Gangrene," reports the case of a female nurse, twenty-one years of age, who stuck herself with a needle under the left thumb-nail. The disease at first was confined to the left upper extremity, but it soon became bilateral, and during the succeeding five years, until the date of her death, every region of the skin, and also the mucous membrane of the upper air-passages, the conjunctivæ, and the vagina, became invaded. Bronchitis, catarrhal pneumonia, and tuberculosis, with a fatal issue, followed. In the beginning all the lesions were gangrenous, but subsequently vesicles and blebs occurred on the gangrenous patches. Doutrelepont<sup>4</sup> (after an interval of four years) has recently given the sequel of this case, and, in the light of Kaposi's series of cases (to be referred to presently), is inclined to look upon it as a universal herpes zoster gangrænosus. Kopp now also takes the same view of his case, to which I have briefly referred.

As allied to this group of cases, I may refer to those examples of so-called gangrenous herpes zoster reported by Kaposi to which allusion has been made, and also to those cases designated by authors as "spontaneous gangrene" and "hysterical spontaneous gangrene." Kaposi<sup>5</sup> has recently reported four of these peculiar cases, to which he gave the name "zoster gangrænosus recidivus atypicus hystericus." These titles sufficiently designate the characteristics of the eruption, but the manner in which they are produced, whether reflexly from the brain or through the vaso-motor system, is not clear. Kaposi is of the opinion that they arise from an hysterical basis and are vaso-motor or tropho-neurotic, and may be explained by the irritation going

<sup>1</sup> Münchener Med. Wochenschr., 1886, No. 38.

<sup>2</sup> La Semaine Médicale, 1888, pp. 416 and 428.

<sup>3</sup> Archiv für Derm. und Syph., 1886, p. 179; and *ibid.*, 1890, p. 385.

<sup>4</sup> Archiv für Derm. und Syph., 1890, p. 385.

<sup>5</sup> Archiv für Derm. und Syph., 1889, p. 561.

from the peripheral nerves directly through the cutaneous vaso-motor centres, or reflexly, meeting in the cord or brain, and calling forth the symptoms.

I have thus brought forward a case which at first seemed obscure in its nature and difficult to classify. Upon looking into the subject we find, however, that more or less similar cases are on record, reported by several well-known observers. Notwithstanding the presence of hysteria, an explanation of the symptoms—nervous and cutaneous—may be found, I believe, by regarding the process as a traumatic ascending multiple neuritis.

In all the cases to which reference has been made, there exists a positive neurotic pathology, which, however, differs somewhat in certain particulars. The most interesting point is whether they are reflex in their nature. This view, as we have seen, is held by several distinguished observers, and the explanation touches upon an almost untrodden, but important, field in cutaneous pathology. In the case which I have described, however, there does not seem to be sufficient ground for regarding the affection as reflex, the symptoms being explicable by local pathology, but I can well understand this to be the proper explanation for some of the other cases to which attention has been directed.















